ABSTRACT

SYSTEM, METHOD, AND APPARATUS FOR PREVENTING ROTATION OF A DISK CLAMP WHILE BEING ASSEMBLED TO THE HUB OF A SPINDLE MOTOR IN A HARD DISK DRIVE AND FASTENER CENTERING FEATURES

[0030] A disk clamp for securing data storage disks to the hub of a spindle motor in a hard disk drive has a circumferential rib protruding from a lower surface of the disk clamp. A complementary recess is formed in the hub of the spindle motor for closely receiving the rib on the disk clamp. The inner diameter of the rib and the outer diameter of the recess are closely toleranced to provide a very precise centering feature for mounting and aligning the disk clamp with respect to the hub and spindle motor. This design reduces the complexity of the tooling and fixtures required to complete the assembly and the overall part cost is reduced.